



<b>TRANSMITTAL FORM</b> <i>(to be used for all correspondence after initial filing)</i>		Application Number	10/763,018
		Filing Date	January 21, 2004
		First Named Inventor	Tan, Zhengquan
		Art Unit	2812
		Examiner Name	Unassigned
Total Number of Pages in This Submission		Attorney Docket Number	A5771C1/T42210

ENCLOSURES <i>(Check all that apply)</i>		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer  <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s)	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter  <input checked="" type="checkbox"/> Other Enclosure(s) <i>(please identify below):</i>  Forms PTO/SB/08A and PTO/SB/08B. Postcard.
Remarks		The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual	Townsend and Townsend and Crew LLP William L. Shaffer Reg. No. 37,234
Signature	<i>William L. Shaffer</i>
Date	5/17/04

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Typed or printed name	Kristina Alvarez		
Signature	<i>Kristina Alvarez</i>	Date	5/18/04

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PATENT  
Attorney Docket No.: A5771C1/T42210

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5/18/04  
TOWNSEND and TOWNSEND and CREW LLP

By: *[Signature]*

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

ZHENGQUAN TAN et al.

Application No.: 10/763,018

Filed: January 21, 2004

For: HDP-CVD DEPOSITION  
PROCESS FOR FILLING HIGH  
ASPECT RATIO GAPS

Examiner: Unassigned

Art Unit: 2812

INFORMATION DISCLOSURE  
STATEMENT UNDER 37 CFR §1.97 and  
§1.98

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

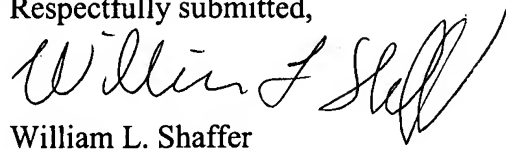
The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. In accordance with 37 CFR §1.98(d), copies of the references can be found in Application No. 09/854,083, filed May 11, 2001 (Attorney Docket No. A5771/T42200). It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement. However, if a fee is required, the Commissioner is authorized to deduct such fee from the

undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "William L. Shaffer", written in a cursive style.

William L. Shaffer  
Reg. No. 37,234

TOWNSEND and TOWNSEND and CREW LLP  
Tel: 650-326-2400 / Fax: 650-326-2422  
WLS/ka  
60218495 v1



PTO/SB/08A (08-03)

Substituted for form PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)		<b>Complete if Known</b>	
		Application Number	10/763,018
		Filing Date	January 21, 2004
		First Named Inventor	Tan, Zhengquan
		Art Unit	2812
		Examiner Name	Unassigned
Sheet 1 of		Attorney Docket Number	016301-042210US

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code <sup>2</sup> (if known)			
	AA	4,667,365	05-26-1987	Martinek	
	AB	4,690,746	09-01-1987	McInerney et al.	
	AC	4,737,379	04-12-1988	Hudgens et al.	
	AD	4,835,005	05-30-1989	Hirooka et al.	
	AE	4,890,575	01-02-1990	Ito et al.	
	AF	4,894,352	01-16-1990	Lane et al.	
	AG	5,013,691	05-07-1991	Lory et al.	
	AH	5,571,571	11-05-1996	Musaka et al.	
	AI	5,571,576	11-05-1996	Qian et al.	
	AJ	5,645,645	07-08-1997	Zhang et al.	
	AK	5,712,185	01-27-1998	Tsai et al.	
	AL	5,719,085	02-17-1998	Moon et al.	
	AM	5,728,621	03-17-1998	Zheng et al.	
	AN	5,750,211	05-12-1998	Weise et al.	
	AO	5,804,259	09-08-1998	Robles	
	AP	5,872,058	02-16-1999	Van Cleemput et al.	
	AQ	5,872,058	02-16-1999	Van Cleemput et al.	
	AR	5,910,342	06-08-1999	Hirooka et al.	
	AS	5,976,327	11-02-1999	Tanaka	
	AT	5,990,013	11-23-1999	Berenguer et al.	
	AU	6,013,191	01-11-2000	Nasser-Faili et al.	
	AV	6,013,584	01-11-2000	M'Saad	
	AW	6,020,458	02-01-2000	Lee et al.	
	AX	6,030,881	02-29-2000	Papasouliotis et al.	
	AY	6,039,851	03-21-2000	Iyer	
	AZ	6,051,321	04-18-2000	Lee et al.	
	BA	6,090,167	07-18-2000	Bhan et al.	
	BB	6,149,779	11-21-2000	Van Cleemput	
	BC	6,150,212	11-21-2000	Divakaruni et al.	
	BD	6,150,285	11-21-2000	Besser et al.	
	BE	6,194,038	02-27-2001	Rossmann	
	BF	6,194,038 B1	02-27-2001	Rossmann	

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.  
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Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		<b>Complete if Known</b>		
		Application Number	10/763,018	
		Filing Date	January 21, 2004	
		First Named Inventor	Tan, Zhengquan	
		Art Unit	2812	
Examiner Name	Unassigned			
Sheet <b>2</b>	of		Attorney Docket Number	016301-042210US

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code <sup>2</sup> (if known)			
	BG	6,197,691	03-06-2001	Lee	
	BH	6,217,658 B1	04-17-2001	Orczyk et al.	
	BI	6,228,751 B1	05-08-2001	Yamazaki et al.	
	BJ	6,258,407 B1	07-10-2001	Lee et al.	
	BK	6,268,297 B1	07-31-2001	Nag et al.	
	BL	6,313,010 B1	11-06-2001	Nag et al.	
	BM	6,355,581 B1	03-12-2002	Vassiliev et al.	
	BN	6,395,150 B1	05-28-2002	Van Cleemput et al.	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	BO	EP	0 822 585	A2	02-04-1998	Applied Materials		<input type="checkbox"/>
	BP	JP	2-58836	A	02-28-1990			<input type="checkbox"/>
	BQ	JP	7-161703	A	06-23-1995			<input type="checkbox"/>
	BR	GB	2 267 291	A	12-01-1993			<input type="checkbox"/>
								<input type="checkbox"/>
								<input type="checkbox"/>

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			<b>Complete if Known</b>		
			Application Number	10/763,018	
			Filing Date	January 21, 2004	
			First Named Inventor	Tan, Zhengquan	
			Art Unit	2812	
			Examiner Name	Unassigned	
Sheet	3	of		Attorney Docket Number	016301-042210US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	BS	V.Y. Vassiliev et al., "Trends in Void Free Pre-metal CVD Dielectrics," <i>Solid State Technology</i> , pp. 129-136 (March 2001).	
	BT	L.Q. Qian et al., "High Density Plasma Deposition and Deep Submicron Gap Fill with Low Dielectric Constant SiOF Films," <i>February 21-22, 1995 DUMIC Conference</i> , pp. 50-56 (February 1995).	
	BU	T. Fukada et al., "Preparation of SiOF with Low Dielectric Constant by ECR Plasma CVD," <i>February 21-22, 1995 DUMIC Conference</i> , pp. 43-49 (February 1995).	
	BV	D. Yu et al., "Step Coverage Study of PETEOS Deposition for Intermetal Dielectric Applications," <i>June 12-13, 1990 VMIC Conference</i> , pp. 166-172 (June 1990).	
	BW	K. Musaka et al., "Single Step Gap Filling Technology for Subhalf Micron Metal Spacings on Plasma Enhanced TEOS/O <sub>2</sub> Chemical Vapor Deposition System," <i>Extended Abstracts of the 1993 International Conference on Solid State Devices and Materials, Makuhi</i> , pp. 510-512 (1993).	
	BX	T. Fukuda et al., "Highly Reliable SiOF Film Formation Using High Density Plasma Containing Hydrogen," <i>February 10-11, 1997 DUMIC Conference</i> , pp. 41-49 (February 1997).	
	BY	G.Y. LEE et al., "A Low Redeposition Rate High Density Plasma CVD Process for High Aspect Ratio 175 mm Technology and Beyond," <i>Proceedings of IEEE 1999 International Interconnect Technology Conference</i> , pp. 152-154 (1999).	
	BZ	V.Y. Vassiliev et al., "Properties and Gap-Fill Capability of HDP-CVD Phosphosilicate Glass Films for Subquarter-Micrometer ULSI Device Technology," <i>Electrochemical and Solid-State Letters</i> , vol. 3, no. 2, pp. 80-83 (2000).	
	CA	NALWA, H.S., <i>Handbook of Low and High Dielectric Constant Materials and Their Applications</i> , vol. 1, page 66 (1999).	
	CB	NGUYEN, s.v., "High-Density Plasma Chemical Vapor Deposition of Silicon-Based Dielectric Films for Integrated Circuits," <i>Journal of Research and Development</i> , vol. 43, 1/2 (1999).	

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